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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/889,497   | 07/18/2001  | Shu Yamaguchi        |                     | 4197             |
| 2292   | 7590        | 05/28/2004           |                     |                  |
| BIRCH STEWART KOLASCH & BIRCH<br>PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |             |                      | EXAMINER            | DOUYON, LORNA M  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 1751                |                  |

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |                  |
|------------------------------|-----------------|------------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)     |
|                              | 09/889,497      | YAMAGUCHI ET AL. |
|                              | Examiner        | Art Unit         |
|                              | Lorna M. Douyon | 1751             |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 17 March 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 17, 2004 has been entered.
2. The rejection of claims 2, 9 and 10 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wilkinson et al. (US Patent No. 5,698,510) is withdrawn in view of applicants' amendment and arguments therein.
3. The rejection of claims 1, 9 and 10 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Appel et al. (US Patent No. 5,998,357) is withdrawn in view of applicants' amendment and arguments therein.
4. The rejection of claims 1, 3-8 and 11 under 35 U.S.C. 103(a) as being unpatentable over Wilkinson as applied to claims 2, 9 and 10 above is withdrawn in view of applicants' amendment and arguments therein.
5. The cancellation of claims 9-11 is acknowledged. Claims 1-8 are pending.

***Claim Rejections - 35 USC § 112***

6. Claims 2, 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is indefinite in the recital of “and 15% or less” in lines 3-4 because it is not clear what this value is for. Presumably, this value is the weight of sodium carbonate as recited in the preceding lines. It is suggested that said phrase be deleted.

Claims 4-8, being dependent on claim 2, are rejected as well.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Dijk et al.(WO 94/02573), hereinafter "Van Dijk".

Van Dijk teaches a high active granular detergent composition with a bulk density of at least 600 g/l and having less than 10% by weight of particles less than 150 microns and less than 10% by weight of particles greater than 1700 microns, to which is post-added additional ingredients which increases the bulk density of the finished product while maintaining good dispensing and dissolution properties (see abstract). The granular detergent particles are made by any suitable process and fines and oversize particles are removed, for example, on a sieve (see page 5, lines 20-24). The composition comprises anionic/nonionic blend wherein the nonionic and anionic surfactant have a ratio of from about 0.01:1 to about 1:1 (see page 13, lines 19-24). The finished composition comprises from 5% to 25% by weight of anionic surfactant (see page 26, line 8). In Example 1, Van Dijk teaches the preparation of a detergent composition wherein a base powder comprising anionic surfactant was sieved through a Tyler sieve mesh 10 to remove the course fraction (>1700 microns), and on a Tyler sieve mesh 65 in order to remove the fines (<212 microns), and to which is added nonionic surfactant, resulting in detergent composition having a bulk density of 1050 g/l and an average particle size of about 400 microns (see entire pages 27-28). Van Dijk also teaches potassium salts of anionic surfactants (see page 12, 1<sup>st</sup> full paragraph), and nonionic surfactants which include condensation products of alcohols having an alkyl group containing from about 9 to 15 carbon atoms with from about 4 to 25 moles of ethylene oxide per mole of alcohol; and condensation products of propylene glycol with ethylene oxide (see page 14, 2<sup>nd</sup> paragraph). Van Dijk also teaches that the granular detergent composition

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comprises from 5% to 20% by weight filler particles comprising sodium salts of carbonates or silicates, or a mixture thereof (see claim 9). Van Dijk, however, fails to disclose the mass base frequency and dissolving rate which satisfies the recited formula.

Considering the detergent particles of Van Dijk having good dissolution properties, and considering the particles having overlapping nonionic/anionic blend ratio, bulk density and particle sizes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the properties of the detergent particles of Van Dijk to satisfy the recited formula because same ingredients with overlapping proportions, bulk density and particle sizes have been utilized.

***Response to Applicants' Arguments***

10. Applicant's arguments filed March 17, 2004 have been fully considered but they are not persuasive.

With respect to Van Dijk, Applicants argue that the present claims are not directed to every and all detergent compositions having the specified components and that the present invention is limited to such detergent compositions having a very particular particle size distribution. Applicants also argue that independent claims 1 and 2 provides a composition that has good detergency and low temperature dispersibility, even when the composition stands in cold water for a long period of time, which beneficial property is neither taught nor suggested by Van Dijk.

The Examiner respectfully disagrees with the above arguments because Van Dijk teaches detergent compositions comprising ingredients and proportions, bulk density and particle size

which overlap those recited, as discussed above. Hence, a person of ordinary skill in the art at the time the invention was made to reasonably expect the detergent composition of Van Dijk to exhibit similar, if not the same, beneficial property.

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. The references are considered cumulative to or less material than those discussed above.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Lorna M. Douyon*  
Lorna M. Douyon  
Primary Examiner  
Art Unit 1751